Available Positions – PhD

Position Number	Deg	Discipline	Position Description
MO-08-56	PhD	Materials Science / Engineering, Materials Chemistry, Nuclear Materials	Perform research and development in materials synthesis and materials performance characterization, including nanostructures. Develop and conduct laboratory experiments to evaluate materials performance under various environmental conditions.
MO-SR-07-028-01	PhD	Statistics / Mathematics	Develop and execute designed experiments, sampling plans and new statistical methods in radioactive waste vitrification, nuclear nonproliferation, multivariate dimensionality reduction analysis, large scale data set analysis.
MO-SR-ESB-07-080-01	PhD	Enzymology / Microbiology / Molecular Biology	Apply enzymology and proteomics skills to the investigation of enzyme mechanisms and kinetics relative to gene expression, protein chemistry and physiological function with focus on functionalized surfaces. At least 2 years relevant experience required.
MO-SR-ESB-07-081-01	PhD	Microbiology / Molecular Biology	Perform development of biotechnologies in bioforensics, biosecurity and nonproliferation / intelligence. At least 6 years relevant experience required.
MO-SR-NHS-07-013-02	PhD	Chemistry / Materials Science	Conduct research and development activities to improve the safety, reliability and operability of hydrogen processing systems. Perform research into the purification, separation, storage and delivery of hydrogen isotopes. At least 5 years relevant experience required.
MO-SR-NHS-07-014-01	PhD	Chemistry / Materials Science	Conduct research and development activities to improve the safety, reliability and operability of hydrogen processing systems. Perform research into the purification, separation, storage and delivery of hydrogen isotopes.

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MO-SR-NHS-07-020-01	PhD	Marine Science	Perform design and execute field experiments in aquatic environments. Perform modeling of fate, transport and chemical processes in coastal ocean and aquatic environments.
MO-SR-NHS-07-069-01	PhD	Mechanical Engineering	Perform ground-truth experiments for the assessment of remote sensing systems. At least 2 years experience in research on projects relating to thermal and fluid sciences with a concentration on remote sensing techniques required.
MO-SR-NHS-07-09-01	PhD	International Security / Diplomacy	Perform all-source intelligence analysis on foreign nuclear programs, proliferation issues and international policy - undertaking, developing, implementing and leading projects for the U.S. Intelligence Community. At least 5 years relevant experience required.
PR-EX-2008-00102	PhD	Chemistry	Perform research in the field of analytical measurements with a focus on sensor development and spectroscopy.
PR-EX-2008-00076	PhD	Chemistry	Support the new Hydrogen Storage Engineering Center of Excellence. Perform modeling, and experiments associated with hydrogen storage systems.
PR-EX-2008-00101	PhD	Chemistry / Physics / Radiochemistry	Perform method development and research in radiochemical measurements including non-destructive assay. Perform research for detection of radioactive and neutron signatures.
PR-EX-2009-00011	PhD	Chemistry / Materials Science	Perform research, method development, and analytical measurements supporting materials characterization with an emphasis on X-ray diffraction and X-ray florescence.
SRNS-08-100	PhD	Science or Engineering	Perform performance assessments to support safe radioactive waste disposition activities to include designing, operating, monitoring and closing waste disposal systems. At least 12 years relevant experience with performance / risk assessments and evaluation of field implementation practices for radioactive waste.

SRNS-08-71	PhD	Chemistry / Chemical Engineering	Perform research and development in the storage, treatment and disposal of liquid high level radioactive waste and closure of waste tanks. At least 2 years relevant experience, to include graduate education, in inorganic chemistry required. Multiple Positions
SRNS-08-72	PhD	Chemistry / Materials Science	Conduct research and development in basic / applied chemistry, process analysis and applicable research areas. Develop analytical tools and forensic methods in support of programs. Multiple Positions
SRNS-08-74	PhD	Chemistry / Chemical Engineering	Perform basic research and process chemistry involving separations science and nuclear chemistry. Areas include actinide separations, fuel dissolution, solvent extraction and byproduct stream decontamination.
SRNS-08-75	PhD	Materials Science / Engineering	Perform research and development in the stabilization of hazardous constituents in ceramic materials and development of ceramic and glass formulations for specialized applications.
SRNS-08-77	PhD	Civil / Environmental Engineering	Develop flowsheets and determine chemical reactions that take place while stabilizing low activity radioactive waste in grout utilizing reaction kinetics, cement process chemistries and property measurement techniques.
SRNS-08-78	PhD	Chemistry / Physical Chemistry	Design waste simulants to support development of ion exchange, precipitation, filtration, agitation, mixing, vitrification and evaporation of liquid radioactive wastes with organic constituents. At least 2 years relevant experience in analytical chemistry methods required.
SRNS-08-79	PhD	Biology / Ecology / Environmental Engineering	Develop research program in ecological stewardship and long term resource management for humid climate ecosystems and stability of engineered remedial action systems. At least 2 years relevant experience required.
SRNS08-81	PhD	Chemistry / Physics / Radiochemistry	Perform research on new compounds for detection of radioactive and neutron signatures in support of safeguard and security initiatives.

SRNS-08-82	PhD	Chemical / Mechanical / Nuclear Engineering	Perform heat transfer and computational fluid dynamics modeling in support of liquid radioactive waste tank mixing and radioactive materials storage and disposition. Graduate level experience in performing numerical computations in the thermal sciences required.
SRNS-08-83	PhD	Chemical / Mechanical / Nuclear Engineering	Perform heat transfer and computational fluid dynamics modeling in support of the radioactive materials packaging and energy security programs. Graduate level experience in performing numerical computations in the thermal sciences required.
SRNS-08-84	PhD	Materials Science / Ceramics / Materials Chemistry	Conduct research and development in the areas of materials performance evaluation, characterization and service life assessment. Develop creative solutions and programs and conduct laboratory experiments leading to effective material selection and utilization.
SRNS-08-85	PhD	Science or Engineering	Develop and implement research programs in the nondestructive examination field with emphasis on electromagnetic, ultrasonic, thermal imaging and/or microwave methodologies as part of a comprehensive program to evaluate and validate nuclear materials and systems.
SRNS-08-86	PhD	Materials Science / Engineering / Materials Chemistry / Nuclear Materials	Perform research and development in materials analysis / development in support of the nuclear fuel cycle including plutonium disposition, nuclear materials and systems surveillance and spent fuel technology development.
SRNS-08-87	PhD	Materials Science / Engineering / Materials Chemistry / Nuclear Materials	Conduct research and development experimental programs in the areas of mechanical testing, characterization, and analysis in hydrogen and tritium technology areas. At least 2 years relevant experience in catalysis materials development required.
SRNS-08-89	PhD	Physics / Engineering	Design and implement mathematical algorithms and models, utilizing field instrumentation for remote sensing in the atmosphere. Background in heat transfer and fluid dynamics.

SRNS-08-90	PhD	Chemistry	Apply radiochemical separation and measurement capabilities. Perform research and development in applications of radiochemistry.
SRNS-08-92	PhD	Meteorology / Atmospheric Science	Develop and implement field projects pertaining to climate and energy programs and ground-truth studies. Application of atmospheric boundary layer modeling, meteorological instrumentation, data collection and software tools.
SRNS-09-123 SRNS-09-124	PhD	Physical / Social Science	Perform intelligence analysis on foreign nuclear programs relative to delivery systems and international proliferation. At least 4 years relevant experience in intelligence / national security.
SRNS-09-125	PhD	Various	Perform enforcement analysis, support enforcement activities and business development. Reside in Washington D.C. area. At least 10 years relevant experience in intelligence / national security.